

UREA-based, cold processable waterproofing and surface protection system for manual application.

DESCRIPTION

UREAFLEX FL COATING is a cold-applied, two-component, hand-applied, solvent free system. Based on isocyanates and special amines, it is particularly suitable for protecting and waterproofing substrates such as concrete, tiles etc. This coating is highly abrasion and UV resistant and combines outstanding features with user-friendly application. Easy to apply by hand (brush, scraper) or with a roller.

AREAS OF APPLICATION

- Protection of concrete surfaces.
- Car parkings.
- Pedestrian decks.
- Industrial flooring.
- Garage floors.
- Terraces and balconies.
- Sewage treatment plant.
- Effluent treat.
- Petrochemical / refineries.
- Port / harbour / airport.
- Water treatment plants.
- Hangars.
- Spillways.

APPLICATION PRESCRIPTIONS

- **Preparation of the surfaces**
Surface preparation is essential for optimum finish and durability. The surface must be clean and free from dust, dirt, fats, oil or other contamination (previously applied coatings and / or loose paint). The moisture content should not exceed 5%. Possible surface irregularities (holes, cracks, tears) must be repaired and/or smoothed or treated with a self-levelling product. New concrete surfaces should dry for minimum 28 days. After cleaning the surface, prepare with UREAFLEX FL CLEAR PRIMER (see TDS UREAFLEX FL CLEAR PRIMER).
- **Preparation of the product**
Stir component A well before using. Then add component B (make sure the canister of the B component is totally emptied). Mix at low speed, to avoid air inclusion, with a mechanical stirrer for about 2 to 3 minutes. Make sure both components A and B are mixed homogeneously. Scrape out the recipient's sides and bottom thoroughly. Component A and Component B are pre-dosed. Never add solvents.
- **Application**
Pour the mixture on the surface and spread evenly with a roller, a metal scraper or a brush until the desired layer thickness. For slip-free surfaces, manually spread enough dry quartz sand over the surface to be treated until there is a rough surface on which a second layer of coating firmly attaches. Allow to cure. UREAFLEX FL COATING cures faster at higher temperature and higher humidity. Remove excess sand particles with a vacuum cleaner. Apply a second layer of UREAFLEX FL COATING within 24 hours so that the sand grains are well embedded. Use dry quartz sand with a particle size of 0.60 mm to 1.2 mm or larger if required.
- For more information, consult the manual "Processing instructions Ureaflex systems".

PRODUCT FEATURES

UREAFLEX FL COATING is a coating with high mechanical properties that creates a strong and hard membrane. The coating can be applied at lower temperatures (min. -5 °C). In that case, the components temperature has to be ≥ 15 °C before the start of application to retain self-levelling capabilities. Low temperatures (< 5 °C) delay the curing and high temperatures accelerate the curing (> 30 °C). Do not leave the mixed product in the mixing drum for more than 10 minutes, as the exothermic reaction accelerates the curing. On the surface, the mixture can be rolled out for up to 20 minutes, depending on ambient temperature. Thicker layers need more time to cure. High humidity will shorten the curing time. Light pedestrian traffic is possible after 24 hours, heavy traffic after 48 hours.

ADVANTAGES

- Seamless membrane.
- 100% UV stable, no yellowing.
- High gloss finish.
- High abrasion and scratch resistance.
- High stain and chemical resistance.
- No VOC.
- Flexible with a high impact resistance.
- Strong bond to different substrates.

TECHNICAL DATA

UREAFLEX FL COATING	Value		Unit	Standard
	A	B (iso)		
Specific weight	1.71	1.11	kg/m ³	ASTM D 0891
Mixing ratio A / B	100 / 54		kg	
Solids	100		%	
Work time	20		min	ASTM D 638
Tack free time	50		min	
Adhesion on concrete	>3 (concrete failure)		N/mm ²	Elcometer

PHYSICAL PROPERTIES

UREAFLEX FL COATING	Test norm	Conditions	Result, Value	Spec or class according NBN EN 1504-2
Abrasion resistance	NBN EN ISO 5470-1	H22/1000 cycles/load of 1000g	< 1000 mg mass loss	
Tear Strength	ISO 34-1	At 23°C 50% RHUM	30.5 kN/m \pm 6	
Tensile Strength	NBN EN 12311-2	At 23°C 50% RHUM	23 MPa \pm 1.3	
Pull off Strength	ASTM D 4541	At 23°C 50% RHUM	7.5 MPa \pm 0.5	
Adhesive Strength	NBN EN 1542	At 23°C 50% RHUM Dry concrete	3.7 N/mm \pm 0.3	

Hardness (Shore D)	ISO 868		77	
Impact resistance	NBN EN ISO 6272-1	1kg weight drop from 0.5m		Class I
Crack bridging property	NBN EN 1062-7	Crack opening at 23°C Crack opening at -10°C		Class A3 Class A2
Water permeability	NBN EN 1062-3	At 23°C, water transmission factor = w		Meets criteria
Water vapour permeability	NBN EN 7783	At 23°C 50% RHUM Sd = equivalent layer thickness		Class II

CONSUMPTION

1,5 kg/m² per mm thickness. For heavy traffic we recommend 2 mm thickness. Standard available in grey colour (RAL 7042). Other RAL colours (6005, 7035, 7043 and 9003) made to order, with a minimum order of 115 sets or 891,25 kg system.

PACKAGING

1 set: A component 5 kg and B component 2.75 kg

STORAGE

The product must be stored in a cool and dry place, away from direct sunlight and at a temperature between 5°C and 35°C. Shelf life of 12 months.

APPLICATOR'S LOG

UREAFLEX FL COATING is a coating system for the professional user. In order to make any claim on the product quality, the user is obliged to complete the user's log. The technical support team of ADCOS NV can assist with specific questions or method statements.

SAFETY AND HEALTH PRECAUTIONS

Wear protective gloves/clothing and eye/face protection.
In case of inadequate ventilation wear respiratory protection.
If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
If on skin or hair: Take off immediately all contaminated clothing. Rinse skin with water/shower.
For more information, consult the safety data sheet.